

Panels (P)

Planetary Protection (PPP.1)

Consider for oral presentation.

NASA PLANETARY PROTECTION PROGRAM OVERVIEW AND UPDATE

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NASA has an integrated planetary protection strategy that leverages COSPAR Policy guidelines, workshops, scientific consensus, partnerships and international working groups to develop policy and implementation guidelines. The Office of Safety and Mission Assurance, which includes NASA's Office of Planetary Protection, depends on these activities to support NASA's missions in the assurance of crew safety and mission success while protecting the public and planetary environment from harmful contamination.

This report will detail the overall planetary protection policy development perspective to support NASA's upcoming mission opportunities for exploration to include crewed Mars and sample return missions. NASA continues to evolve its strategies, policies, and standards. NASA's support in the COSPAR workshop series on Refining Planetary Protection Requirements for Crewed Missions to Mars have resulted in a NASA interim directive and paved the way for the development of NASA planetary protection roadmaps. These Agency level roadmaps address technology development and testing required to fill knowledge gaps for developing responsive policy guidelines and quantitative technical standards. In addition to workshops and technology management strategies, NASA is also leveraging the National Academies of Science, Engineering, and Medicine's Committee of Planetary Protection to serve as a source of advice on planetary protection measures. Finally, the report will include how the Office of Safety and Mission Assurance is incorporating planetary protection into existing and new multi-agency partnerships.